

Alaska Operator Certification Program Report for State Fiscal Year 2020

August 2020



Michael J. Dunleavy, Governor Kevin Meyer, Lieutenant Governor Jason W. Brune, Commissioner, Department of Environmental Conservation Page intentionally left blank

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Executive Summary

The Safe Drinking Water Act Amendments of 1996 directed the Administrator of the United States Environmental Protection Agency, in cooperation with the States, to develop, implement, and enforce minimum standards for certification and recertification of operators of community and non-transient non-community public water systems. This annual program report for the Alaska Operator Certification Program is submitted pursuant to federal guidelines published in the Federal Register dated February 5, 1999 and in accordance with the guidelines provided by the EPA Drinking Water Protection Division. Alaska's annual operator certification report provides an update on the implementation of the Operator Certification Program for the period from July 1, 2019 through June 30, 2020.

Alaska currently regulates 650 community, non-transient non-community, and transient non-community¹ public water systems. In State Fiscal Year 2020, 81% of all water systems were compliant with the operator certification requirements by having operators certified at levels commensurate with the systems' classifications. During State Fiscal Year 2020, the Alaska Operator Certification Program continued efforts to classify water systems, certify operators, and track and improve compliance rates.

The public health objectives of the Operator Certification Program are to ensure that the customers of Alaskan public water systems are provided with an adequate supply of safe, potable drinking water, are confident that their water is safe to drink, and that the operators are trained and certified as well as have the knowledge and understanding of public health reasons for drinking water standards.

Antibacksliding

The implementation of the federal requirements and level of service provided by the Alaska Operator Certification Program remains the same and no backsliding has occurred since submitting the annual report covering State Fiscal Year 2019.

¹ Per 18 AAC 74.006 and 18 AAC 74.400, transient non-community water systems using surface water or groundwater under the influence of surface water as a source are required to have properly certified water operators .

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Authorization (Baseline Standard 1)

Under the Safe Drinking Water Act (SDWA) Amendments of 1996, the State primacy agency is required to implement an Operator Certification Program and to provide annual reports in order to receive the full federal allocation under the Drinking Water State Revolving Fund (DWSRF). The Environmental Protection Agency (EPA) may withhold 20% of the State's funding if the Operator Certification Program requirements are not met.

The Alaska Department of Environmental Conservation (ADEC) is the designated State primacy agency for the Safe Drinking Water Act. The Operator Certification Program (OpCert) is housed within the ADEC's Division of Water, and is responsible for classifying water systems and certifying operators. Additionally, the Governor's Water and Wastewater Works Advisory Board (Board), comprised of eight water/wastewater professionals appointed to five year terms by the Governor, provide counsel regarding critical programmatic efforts and decisions.

In response to federal guidelines, the Alaska Operator Certification Program regulations were revised in 2001 to include oversight of all community, non-transient non-community systems, and transient non-community systems that use surface water or groundwater under the influence of surface water as a source. Prior to 2001, OpCert only regulated systems serving populations of greater than 500 people or having greater than 100 service connections. Since 2001, OpCert's implementation of the program has consistently been approved by EPA as compliant with the 1996 Amendments to the SDWA.

Classification of Systems, Facilities, and Operators (Baseline Standard 2)

Water systems in Alaska are classified according to a point rating system that includes the production capacity, source water type, and complexity of the treatment processes. While the classifications of existing systems have been documented, constant attention must be paid to keep the data current as systems evolve, as well as to classify new systems.

The 650 Alaskan community water systems (CWS), non-transient non-community water systems (NTNCWS), transient non-community water systems (TNCWS) requiring certified operators are classified as follows:

System Type	Class	Number of Systems
Small	Untreated ²	283
Small	Treated ³	121
Water Treatment	1	97
Water Treatment	2	115
Water Treatment	3	6
Water Treatment	4	4
Water Distribution	1	19
Water Distribution	2	3
Water Distribution	3	2

Table 1: System Types

Classification efforts continued using a variety of methods during the State Fiscal Year 2020 (SFY20) reporting period.

- OpCert distributed detailed classification data to all system owners. Owners were asked to review data for accuracy and respond when necessary.
- As in the past, OpCert continued to work closely with the Drinking Water Program (DWP) during the plan review process. DWP considers operator certification requirements and consults with OpCert when issuing approvals to construct and operate.
- OpCert staff reviewed sanitary survey reports, provided by DWP, which contain updated information regarding the current configuration of water systems.
- OpCert worked closely with engineers from the Village Safe Water Program (VSW) and the Alaska Native Tribal Health Consortium (ANTHC), as well as consulting engineers, who are required to consult with OpCert regarding classification issues as systems are being designed or modified.

Operators in Responsible Charge of Water Systems

All public water systems are required to have a designated operator in responsible charge (ORC), who holds certification at a level equal to or greater than the classification of the system. For water treatment and water distribution systems, the ORC must be on-site at the system or, if off-site, the ORC must be available by radio or telephone and be on-site at the system within

² A small untreated system serves fewer than 500 people, fewer than 100 service connections, and adds no chemicals to the water. Small untreated systems may perform passive treatment such as softening or cartridge filtration.

³ A small treated system serves fewer than 500 people, fewer than 100 service connections, and adds one chemical to the water. Small treated systems may perform passive treatment such as softening or cartridge filtration.

the hour. For small untreated and small treated water systems, the ORC must be on-site at the system or, if off-site, the ORC must be available by radio or telephone and be on-site at the system within three hours. The ORC makes all operational decisions.

The following chart summarizes water system compliance at the end of SFY20.

System Class	Number of Systems	Without Certified ORC	With Certified ORC	Percent with Certified ORC	With Certified ORC at the Correct Level	Percent with Certified ORC at the Correct Level
SU	283	40	243	86%	243	86%
ST	121	16	105	87%	105	87%
WT1	97	24	73	75%	72	74%
WT2	115	24	91	79%	75	65%
WT3	6	0	6	100%	6	100%
WT4	4	0	4	100%	4	100%
WD1	19	0	19	100%	19	100%
WD2	3	1	2	67%	1	33%
WD3	2	0	2	100%	2	100%
Total	650	105	545	84%	527	81%

Table 2: Compliance by System Type

SU = Small Untreated WT = Water Treatment ST = Small Treated WD = Water Distribution

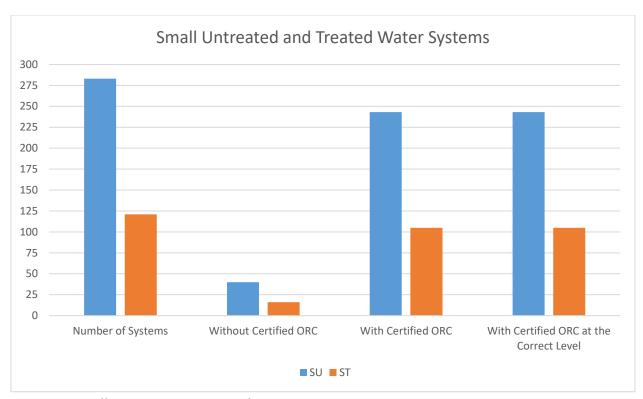


Figure 1: Small Water System Compliance

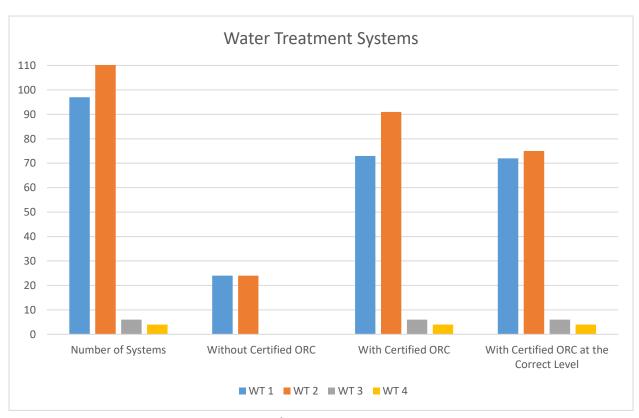


Figure 2: Water Treatment System Compliance

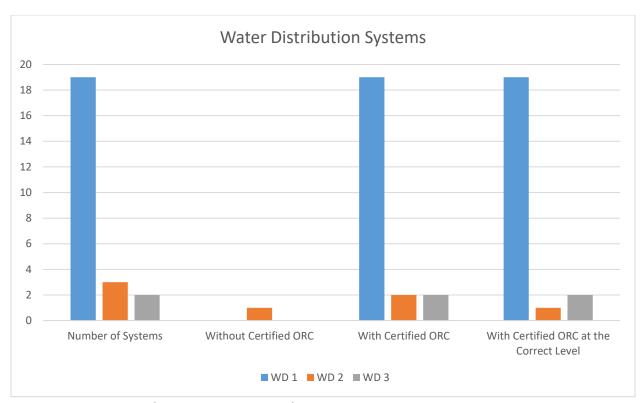


Figure 3: Water Distribution System Compliance

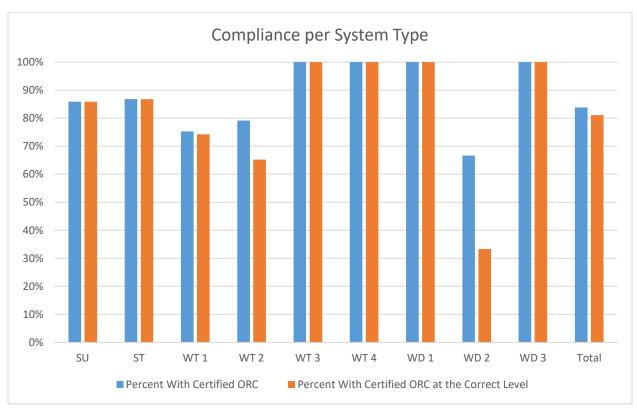


Figure 4: Compliance per System Type

Maintaining Operator and System Information

Operator in responsible charge compliance data is updated in the OpCert database using the following methods:

- Upon certification, operators are associated with systems based on information provided in their applications.
- Operator data is updated when OpCert staff reviewed Sanitary Survey reports provided by DWP.
- Operator data is included as part of the routine notification to system owners regarding system classifications and system owners notified OpCert of required changes.
- Operator data is confirmed using the Remote Maintenance Worker (RMW) Program
 quarterly reports. The RMW Program is comprised of 15 circuit riders who provide
 technical assistance to approximately 200 rural systems across the state. RMWs report
 current operator information for each system they support on a quarterly basis and
 OpCert uses this information to update operator data.

Operator Qualifications (Baseline Standard 3)

Exam Administration

To become certified, operators must pass exams and meet experience and education requirements. There are five levels of certification each in water treatment and water distribution and two levels in small water system operations. Exams are available for each level and offered in a variety of settings.

Exams are purchased from the Association of Boards of Certification (ABC). ABC exams are used by more than 70 certification programs representing over 40 states, 10 Canadian provinces and territories, as well as numerous international and tribal programs. ABC provides both paper and web based versions of the standardized water treatment and water distribution exams for levels 1 through 4. The ABC standardized exams were developed through a rigorous psychometric process that included use of in depth job analyses surveys, development of "Need-to-Know" criteria from data acquired from the surveys, creation of exam items by subject matter experts, and beta testing of exams by operators in the United States and Canada. ABC released 2019 standardized exams early in 2020 and the transition from the 2017 standardized exams to the new version started on June 1, 2020.

Exams are administered on-demand in rural communities in addition to the biannual statewide paper-based exams and online exams. Applications for certification are not reviewed until after operators pass exams and it is the responsibility of the operators to submit applications. In some cases, operators take exams at levels higher than previous passed exams knowing that they have not yet met the eligibility requirements for the higher levels of certification. In those cases, applications are not typically submitted immediately. For that reason, the number of exams passed often does not reflect the number of certifications issued.

As a result of the COVID-19 pandemic, the number of exams administer between March and June dropped to almost zero. This was due to tribal health corporations and private trainers canceling courses, online testing centers closing, and the closing of schools where teachers administer paper-based exams.

- OpCert was only able to administer one statewide, paper-based exam cycle in the Fall of SFY20. The Spring exam cycle was canceled due to the COVID-19 pandemic. Five operators took six water related certification exams in three proctored locations across the state. Of the six exams taken, five were passed resulting in three certifications. For the two remaining, applications for certification have not yet been submitted. Each exam cycle represents a month long effort by OpCert staff in reviewing exam registration forms, scheduling proctor sites, mailing exams, notifying operators, and processing exam results. During the SFY20 exam cycle, paper-based exams were administered in Anchorage, Utqiagvik (formerly Barrow), and Fairbanks.
- OpCert has been administering on-demand paper exams in rural communities since 2016. In SFY20, on-demand paper-based exams were administered in 17 rural communities to 29 operators who took 35 exams with 15 exams passed resulting in 12 certifications. For the remaining three, applications for certification have not yet been submitted.
- Provisional level exams were administered at four introductory courses taught by tribal health corporations and private trainers. Courses consisted of four days of instruction followed by the water treatment and/or water distribution provisional level exams. The small untreated and small treated exams were also administered at courses as needed. Sixty-eight operators attended the courses and took a total of 85 exams. Operators passed 27 exams with 13 resulting in certification. For the 14 remaining, applications for certification have not yet been submitted. Due to the COVID-19 pandemic, two introductory courses were canceled.
- Small treated exams were administered at four small treated water systems courses taught by tribal health corporations. Courses consisted of two and a half days of instruction followed by the small treated exam. Thirty-eight operators the courses and took 38 exams. Operators passed 21 exams with 21 resulting in certification. Due to the COVID-19 pandemic, one small treated water system course was canceled.

- Level 1 and 2 exams were administered at a combination level 1 and 2 course taught by
 a private trainer. The course consisted of four days of instruction followed by the water
 distribution level 1 or 2 exam. Twelve operators attended the course and took 12
 exams. Operators passed 12 exams resulting in seven certifications. For the five
 remaining, applications for certification have not yet been submitted. Due to the COVID19 pandemic, one water distribution level 1 and 2 course was canceled.
- Level 2 exams were administered at an intermediate water treatment course taught by a private trainer. The course consisted of four days of instruction followed by the water treatment level 2 exam. Eleven operators attended the course and took 11 exams.
 Operators passed five exams resulting in two certifications. For the three remaining, applications for certification have not yet been submitted.
- Online certification exams for small untreated and small treated water system operators
 were available at 11 testing locations: Anchorage, Bethel, Dillingham, Fairbanks, Homer,
 Glennallen, Kenai, Ketchikan, Klawock, Kodiak, and Palmer. Seventeen operators took
 online small water system exams with 17 passing with all resulting in certification.
- Online water treatment and water distribution exams were available at 14 testing locations throughout Alaska: Anchorage, Bethel, Utqiagvik, Cordova, Fairbanks, Homer, Juneau, Kenai, Ketchikan, Klawock, Kodiak, Palmer, Sitka, and Valdez. The expedited registration process allows operators to be authorized for online exams in less than a month. Registration deadlines are the 1st of each month and operators are authorized for exams by the 22nd of the same month. Operators are allowed 100 days from authorization to take exams. The OpCert database provides operators the convenience of online exam registration using credit cards to pay fees. Ninety-six operators took 155 water treatment/distribution exams online. Operators passed 82 exams resulting in 45 certifications. For the 37 remaining passed exams applications for certification have not yet been submitted.

The following chart summarizes exam pass rates by delivery type.

Туре	Exams	Exams Passed	Certifications
Exam Cycle	6	5	3
On-Demand	35	15	12
Provisional Courses	85	27	13
Small Treated Courses	38	21	21
Level 1 & 2 Courses	12	12	7
Intermediate Courses	11	5	2
Online SU & ST	17	17	17
Online WT & WD	155	82	42

Table 3: Exam Pass Rate by Delivery Type

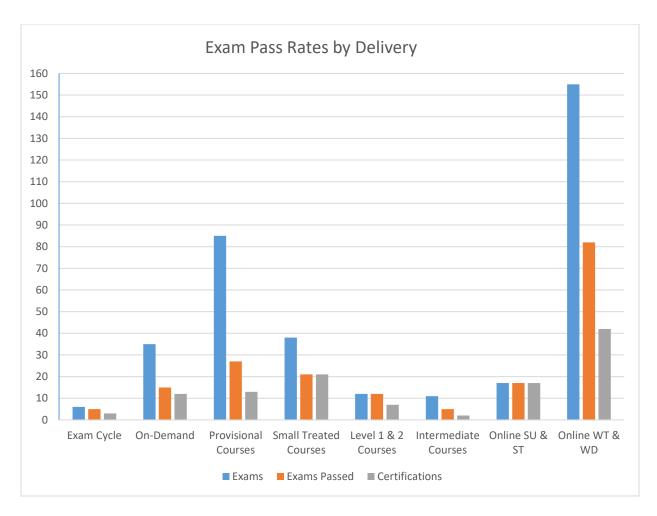


Figure 5: Exam Pass Rate by Delivery

The number of paper-based exams administered during the exam cycle has declined each year since online exams became available in 2011 due to flexible scheduling and instant scoring. The following chart summarizes the shift from paper-based exams to online exams.

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Total Paper- Based*	210	177	182	119	120	100	85	65	82	41
On-Demand Paper							30	43	65	35
Online	57	105	183	168	173	195	243	211	167	172
Total	267	282	365	287	293	295	328	276	249	213

^{*}Total Paper-Based is the exam cycle and on-demand paper exams and does not include paper exams administered at courses.

Table 4: Paper-Based vs. Online Exams

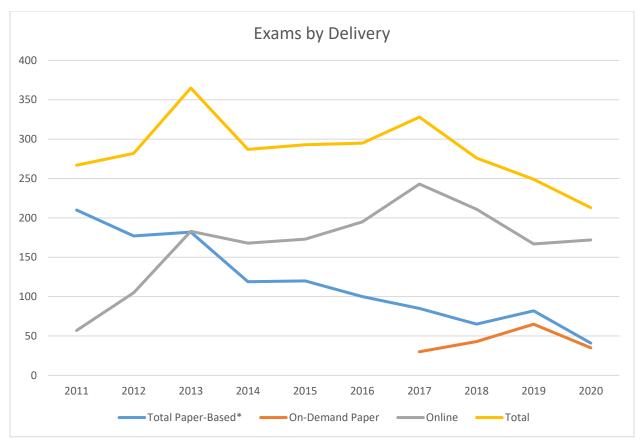


Figure 6: Comparison of Exam Delivery

For SFY20, there was a significant decrease in the number of on-demand paper based exams administered due to limitations as a result of the COVID-19 pandemic.

Certification of Operators

After passing a certification exam, operators are required to meet education and experience requirements in order to obtain certification. The minimum education requirement for certification is possession of a high school diploma, GED, or relevant experience substituting for the lack of education. Level 3 and 4 certifications require additional postsecondary education. Minimum experience requirements for certification are outlined in 18 AAC 74.050.

Reciprocity

Reciprocity is evaluated on a case-by-case basis taking into consideration the experience and education requirements of the certificate the operator holds from the other state, the exam passed, and education and operations experience. By Statute, reciprocity cannot be granted for certificates from states that do not grant reciprocity for Alaska certifications. Five water related certificates were issued via reciprocity for SFY20.

Enforcement (Baseline Standard 4)

OpCert continued to place emphasis on increasing exam availability and educating operators and systems about the certification requirements. As a result, OpCert staff spent significant time responding to requests for information regarding the certification requirements for large and small systems.

Historically, OpCert has focused on compliance assistance. In 2013, a Compliance and Enforcement Strategy was developed that outlines the enforcement process and describes a ranking system used to determine where OpCert will focus its efforts.

Additionally, the Drinking Water regulations (18 AAC 80) require that systems comply with the Operator Certification regulations (18 AAC 74). Therefore, DWP includes operator certification requirements as part of their enforcement actions, and both programs continue to work closely with noncompliant systems.

Efforts to Increase Compliance Rates

Water Treatment and Water Distribution Systems

During the SFY20 reporting period, OpCert continued a quarterly schedule of analyzing the compliance status of systems. Compliance data was gathered and systems were ranked using the method described in the Compliance and Enforcement Strategy. The ranking method considers factors such as system type, population served, source water, and system classification.

All systems, regardless of compliance status, were mailed letters including a summary of the certification requirements, detailed system classification data, and operator information. OpCert received a number of responses from system owners with updated information and provided assistance regarding options for achieving compliance.

In order to enhance the tracking of compliance and enforcement, the water treatment and water distribution systems are divided up into geographical regions and assigned to one of the OpCert staff. This regionalized approach is also used by other ADEC programs, as well as a technical assistance providers that support water systems, and allows "regional teams" to work together to address compliance issues.

Additionally, OpCert conducted weekly staff meetings to keep abreast of the status of noncompliant system.

Small Untreated and Small Treated Water Systems

All Small Untreated and Small Treated water systems, regardless of compliance status, were sent compliance notification letters. OpCert continued to track the compliance status of these systems and worked with operators to obtain certification.

As with the larger systems, the small water systems are divided up into geographic regions and assigned to one of the OpCert staff for more individualized attention. Additionally, OpCert conducted weekly staff meetings to keep abreast of the status of noncompliant system.

Agency Coordination Meeting

OpCert participated in agency coordination meetings in six rural regions of the state. The meetings provided an opportunity to coordinate with agencies that work with rural Alaskan communities on issues related to sanitation. Other agencies participating in the meetings included regional tribal health corporation RMWs and sanitarians, the Rural Utility Business Advisor Program (RUBA), DWP, the ADEC Wastewater and Solid Waste Programs, and VSW and ANTHC engineers. During the meetings, OpCert described the compliance status of each rural community, received input from other agencies regarding community specific issues, updated classification and operator information, and discussed options available to communities for achieving compliance.

Compliance Rates

As reported in 2019, 84 percent of systems were in compliance by having a properly certified operator on staff. Currently, 81 percent of systems are in compliance.

OpCert conducted a review of systems that changed compliance status from 2019 to present. Those findings are shown in Appendix A. The review shows that the overall compliance rate was affected by a number of factors:

- Systems achieving compliance (21 systems)
- New systems becoming active and achieving compliance (5 systems)
- New systems becoming active and still working toward compliance (1 systems)
- Systems upgraded in classification and still working toward compliance (1 system)
- Operator turnover where properly certified operators left a system (14 systems)
- Operators failing to renew certifications (15 systems)

System Specific Training and Certification (S²TC)

Previous reports discussed efforts to develop 13 training modules and certification exams that will be used to train and certify operators of systems that are chronically out of compliance with the operator certification requirements. During SFY20, OpCert, in collaboration with the RMW Program, has worked to finalize four modules in preparation for S²TC Program beta testing. Six communities, all of which have long standing operators who have not passed certification exams despite repeated attempts, have been identified for beta testing during SFY21.

Operator Disciplinary Action

Per 18 AAC 74.830, OpCert, with the Board's recommendation, has the authority to impose disciplinary action for acts of misconduct by an operator. In SYF20, OpCert investigated one allegation of operator misconduct; however, no operator misconduct was found. Additionally, an operator's certificate that was suspended in SFY19 was reinstated in September 2019 after the 45 day suspension period and payment of a certificate reactivation fee.

Certificate Renewal (Baseline Standard 5)

Operators are required to obtain continuing education every three years in order to renew certifications. Operators holding water treatment or water distribution certification are required to obtain three Continuing Education Units (CEUs), while operators holding Small Treated or Small Untreated certification are required to obtain one and 0.5 CEU, respectively. An operator who has obtained the required CEUs, has up to one year to pay the renewal fee. However, the price of renewal increases over time during that one year and the certificate is not valid until the fee has been paid.

For SFY20, the following number of certificates were renewed.

Certificate	Renewed
SU	36
ST	49
WT P	41
WT 1	69
WT 2	52
WT 3	30
WT 4	31
WD P	53
WD 1	63
WD 2	39
WD 3	25
WD 4	21
Total	509

Table 5: Number of Renewed Certificates in SFY20

Continuing Education

Alaskan operators earned continuing education through the following means:

- Classroom courses taught by a variety of organizations
- Correspondence courses
- Utility sponsored training
- Industry conferences
- Online training

During the SFY20 reporting period, OpCert recorded over 1,400 individual continuing education courses attended to operators' files. OpCert continued its support of training by approving 68 online and classroom courses. The Alaska Rural Water Association sponsored a statewide conference and the Alaska Water Wastewater Management Association sponsored a regional conference in Juneau.

California State University Small Water System Videos

During the SFY20 reporting period, OpCert administered 18 of the California State University (CSU) *Small Water System* and *Water Systems Operation and Maintenance* correspondence type video series courses. The video courses are especially relevant to the operation and maintenance of small water systems and provide small system operators with the continuing education required to keep their certifications current.

ADEC Introduction to Small Water Systems Correspondence Course

The Introduction to Small Water Systems manual is administered as a correspondence course by OpCert. This course qualifies operators for provisional level water treatment and distribution certification after passing the respective certification exams. Five operators completed this course during the SFY20 reporting period.

ADEC Small Untreated and Small Treated Water Systems Correspondence Courses

The University of Alaska, Southeast (UAS), in Sitka, administered online Small Treated and Small Untreated Water System courses until August 2019 when the Water/Wastewater Program at UAS, Sitka was discontinued along with support for their online water/wastewater courses. Unfortunately, OpCert did not have the capability to continue offering the online courses and reverted to paper-based administration of the courses. The Small Untreated Water System course qualifies operators for Small Untreated Water System certification after passing the certification exam. Seven operators completed this course during the SFY20 reporting period. The Small Treated Water System course qualifies operators for Small Treated Water System certification after passing the certification exam. Nineteen operators completed this course during the SFY20 reporting period.

Presentations at Conferences

OpCert attended and presented at the ARWA Annual Statewide Conference and the AWWMA Southeast Alaska Regional Conference on topics covering operator certification including the importance of certification, exam preparation, the exam/certification process, and online operator profiles.

Resources Needed to Implement the Program (Baseline Standard 6)

OpCert is funded from two sources: Program Receipts generated from fees charged for exams, application reviews, certificate renewals, and reciprocity reviews; and Drinking Water State Revolving Fund (DWSRF) Local Assistance and Other State Programs Set-Aside.

OpCert consists of one program manager, three full-time professional level staff, and one part-time college intern. OpCert staff provide all services related to operator certification including administration of exams, review of certification applications, classification of water systems, review of training courses for continuing education, and compliance and enforcement of water systems. OpCert has a customized database to track all data related to operator certification. This database is maintained via a five year contract with Wostmann Associates.

Under the current organization, and with the present level of funding, Alaska has sufficient resources to implement the OpCert Program of the foreseeable future. For several years, the DWSRF Small System Technical Assistance Set-Aside has not been used; those banked funds will be made available to OpCert should the need arise in future fiscal years.

Recertification (Baseline Standard 7)

Certificates are valid for a three year period beginning on January 1 of the year of issuance. Once a certificate has expired, the operator is no longer certified. To regain certification, an operator must take and pass the exam and then apply for certification. Operators are allowed to take the exam at the level of the expired certificate for three years after expiration. After three years, operators must retake exams sequentially starting at level 1.

Stakeholder Involvement (Baseline Standard 8)

Stakeholder involvement is important to meeting the public health objectives of Alaska's Operator Certification Program. It helps ensure relevancy and validity of the program, and the confidence of all interested parties. In recognition of this, Alaska employs various strategies to include ongoing stakeholder involvement including an advisory board.

The Governor's Water and Wastewater Works Advisory Board

The Governor's Water and Wastewater Works Advisory Board is a group of eight water/wastewater professionals established to advise ADEC on all matters of operator certification and training. The current Board is comprised of certified operators, public works personnel, trainers, and engineers. New members to the Board are appointed by the Governor. In September 2019, one of the Board members accepted a position as the Technical Assistance and Financing Program Manager at ADEC and resigned her seat. However, in her new position, she sits on the Board as the Commissioner's designee. In February 2020, a replacement was named by the Governor. The Board generally meets every 9 to 12 months, as needed. Due to travel restriction from the COVID-19 pandemic, as well as a lack of pressing business, no Board meetings were held during SFY20.

Program Review (Baseline Standard 9)

The Facilities Program Manager and the Technical Assistance and Financing (TAF) Program Manager assist in conducting periodic peer review meetings of the Operator Certification Program's processes, procedures, and data management. The Operator Certification Program's

three Environmental Program Specialist (EPS) are each assigned to work with water systems in a geographic region of Alaska, consistent with the regional assignments of RMWs and Local Government Specialists with the RUBA Program. This allows each EPS to develop a relationship with the system owners and operators in their regions, as well as the technical assistance providers that support them, thus enhancing communication. This approach has also improved program efficiency and effectiveness. Additionally, weekly system compliance meetings are conducted to keep the TAF Program Manager and the Operator Certification Program Manager abreast of the compliance status of the systems in each EPS's region.

Special Projects during the SFY20 Reporting Period

In addition to the routine work of the Operator Certification Program, OpCert staff spent significant time and effort on special projects during SFY20.

- Technical Assistance Provider Enhancement in the OpCert Database
- Introductory and Intermediate Water Distribution Course Development
- Water System Excellence Award

Technical Assistance Provider Enhancement to the OpCert Database

During SFY20, the contractor from Wostmann Associates, along with OpCert staff, worked on the development of adding technical assistance provider information to system data. Community records were created to which system and technical assistance provider information were added, see Figures 7 - 9. This addition provides OpCert staff a quick and easy way to access contact information for Drinking Water Program staff, Remote Maintenance Workers, and other technical assistance providers. Further, this modification paves the way for future improvements directed at improving the efficiency of distributing pertinent data to all parties that provide support and technical assistance to specific water systems.

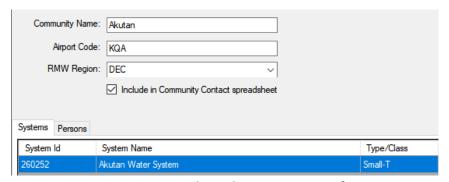


Figure 7. Community Record Displaying System Information

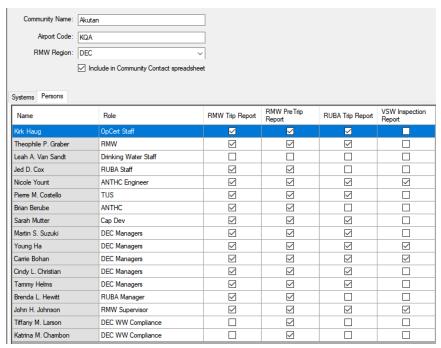


Figure 8. Community Record Displaying Technical Providers

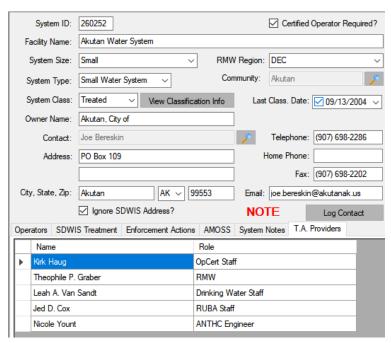


Figure 9. System Record Displaying Select Technical Assistance Providers

Introductory and Intermediate Water Distribution Course Development

Trainers in the Alaska have been using the *Introduction to Small Water Systems* manual developed in the 1990s, and revised in 2009 and 2014, to introduce operators to the concepts of water treatment and water distribution. Additionally, trainers have been using the manual to

prepare operators initially for the water treatment and water distribution Operator-In-Training level exams and then, after implementation of ABC exams in April 2005, for the level 1 exams. The course content of the introductory manual started to diverge from the exam content once OpCert began using ABC exams. The revisions in 2009 and 2014 conducted by volunteers and OpCert helped "refresh" the manual, but were still not in line with ABC exam content. OpCert searched for alternatives to the *Introduction to Small Water Systems* manual and found that in 2016 the American Water Works Association (AWWA) published an update to the Water System Operations (WSO) Water Transmission and Distribution manual. AWWA, in cooperation with ABC, developed two volumes from the original WSO Water Transmission and Distribution manual. These two volumes were divided into Grades 1 and 2, and 3 and 4 in alignment with the ABC water distribution exam levels. Initially, AWWA was going to develop course curriculum for the WSO manuals; however, this never came to fruition. As a result, OpCert decided to seek an alternative means to develop training courses.

In the Winter of 2019, OpCert solicited proposals for development of a water distribution level 1 and 2 training course curriculum and associated materials that reflect current water distribution technology and are in line with current testing materials. The intent is for OpCert to make this course material available to trainers as a "Course in a Box." The course materials are to be based on the AWWA WSO Water Distribution Grade 1 and 2 manuals. NTL Alaska, Inc. was awarded the contract in March 2020 and OpCert anticipates completion of course curriculum and materials by the end of August, with an online introduction of the course materials to trainers in September.

Water System Excellence Award

The Water System Excellence Award (WSEA) is a joint venture between OpCert and DWP. The WSEA recognizes water systems that achieve outstanding performance in the operation of their systems. The WSEA has two tiers, Ursa Major and Ursa Minor. To earn the Ursa Major award, a water system must maintain four quarters of operator certification compliance with no open, unresolved, or incurred drinking water violations during the award year. To earn the Ursa Minor award, a water system must maintain four quarters of operator certification compliance with no more than one open, unresolved, or incurred drinking water violation during the award year, or maintain three quarters of operator certification compliance with no open, unresolved, or incurred drinking water violations during the award year. For the 2019 award year, 254 were awarded Ursa Major and 90 were awarded Ursa Minor. Copies of the certificates mailed to the awardees is included in Appendix B.

Implementation Schedule Update

Program implementation will proceed as follows over the next year:

- Maintain the current level of exam availability by offering exams on demand in rural communities, during the biannual exam cycles, in conjunction with courses, and in an online format.
- Continue efforts to development the training and exam materials required for the System Specific Training and Certification Program and move forward with program implementation. This task will continue through a contract with the University of Alaska.
- Continue with implementation of the Compliance and Enforcement Strategy through a quarterly analysis of compliance data and targeted communication to systems, taking advantage of OpCert's approach to offering exams on demand in rural communities.
- Continue efforts to consolidate operator certification and capacity development functions under the Capacity Development and Operator Certification Program.

Appendix A Changes in Compliance

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Water Treatment Systems

System	Class	July 2019	July 2020	Comments
Dillingham	WT 1	Out of Compliance	In Compliance	
Eagle Log Wellhouse	WT 1	Out of Compliance	In Compliance	
Nenana	WT 1	Out of Compliance	In Compliance	
Pilot Station	WT 1	Out of Compliance	In Compliance	
Rampart	WT 1	Out of Compliance	In Compliance	
SA Exploration Sleigh Camp #1	WT 1	Out of Compliance	In Compliance	
SA Exploration Sleigh Camp #2	WT 1	Out of Compliance	In Compliance	
AC Alaska Commercial Store	WT 1	In Compliance	Out of Compliance	Operator certificate expired
Allakaket	WT 1	In Compliance	Out of Compliance	Operator certificate expired
Chilkat Indian Village	WT 2	In Compliance	Out of Compliance	Operator certificate expired
FAA Bethel Well	WT 1	In Compliance	Out of Compliance	Operator certificate expired
North Pacific Seafoods Togiak				System reclassified from Small T to
Fisheries	WT 2	In Compliance	Out of Compliance	WT 2
Seldovia	WT 2	In Compliance	Out of Compliance	Operator turnover
Shaktoolik	WT 2	In Compliance	Out of Compliance	Operator turnover
Valley Water Company	WD 2	In Compliance	Out of Compliance	Operator certificate expired
Conoco Phillips AKS Willow 1 Remote				
Ice Camp	WT 1	No System	Out of Compliance	New System

Small Untreated and Treated Water Systems

System	Class	July 2019	July 2020	Comments
AK Gateway SD - Northway School	Small U	Out of Compliance	In Compliance	
AK Gateway SD - Tetlin School	Small U	Out of Compliance	In Compliance	
AK Gateway SD - Tok School	Small U	Out of Compliance	In Compliance	
Akutan	Small T	Out of Compliance	In Compliance	
Central Commercial Park Water System	Small U	Out of Compliance	In Compliance	
Homestead Hills	Small U	Out of Compliance	In Compliance	
Interact Ministries	Small U	Out of Compliance	In Compliance	
Sears Wasilla	Small U	Out of Compliance	In Compliance	
Wildwood Mobile Home Park	Small U	Out of Compliance	In Compliance	
MSBSD Facilities Department Water				
System	Small U	No System	In Compliance	New System
Shadow Mountain Water System	Small U	No System	In Compliance	New System
Silver Bay Seafoods False Pass	Small U	No System	In Compliance	New System
SWRSD Twin Hill School Water System	Small U	No System	In Compliance	New System
USNPS Katmai King Salmon	Small T	No System	In Compliance	New System

System	Class	July 2019	July 2020	Comments
Aleutian Village TC	Small U	In Compliance	Out of Compliance	Operator turnover
Borealis Alpha	Small U	In Compliance	Out of Compliance	Operator turnover
Cohoe S/D	Small U	In Compliance	Out of Compliance	Operator certificate expired
Denali Backcountry Lodge	Small T	In Compliance	Out of Compliance	Operator certificate expired
Denali Borough SD - Anderson	Small U	In Compliance	Out of Compliance	Operator certificate expired
Denali Borough SD - Cantwell	Small U	In Compliance	Out of Compliance	Operator certificate expired
Denali Borough SD - Tri-Valley	Small U	In Compliance	Out of Compliance	Operator certificate expired
DOT & PF - Fox Spring	Small U	In Compliance	Out of Compliance	Operator turnover
Everetts at Mat Su Resort	Small U	In Compliance	Out of Compliance	Operator turnover
Highland Trailer Park	Small U	In Compliance	Out of Compliance	Operator certificate expired
Inlet View MHP Chugiak	Small U	In Compliance	Out of Compliance	Operator certificate expired
Kenny Lake Community Well	Small U	In Compliance	Out of Compliance	Operator turnover
Kenny Lake Fire Hall	Small U	In Compliance	Out of Compliance	Operator turnover
Larry's Apartments	Small U	In Compliance	Out of Compliance	Operator certificate expired
Orion Marine Man Camp - Cape				
Lisburne	Small T	In Compliance	Out of Compliance	Operator turnover
Peter Pan Seafood Port Moller	Small T	In Compliance	Out of Compliance	Operator turnover
Pitka's Point	Small T	In Compliance	Out of Compliance	Operator turnover
Shageluk	Small T	In Compliance	Out of Compliance	Operator turnover
Tanacross	Small U	In Compliance	Out of Compliance	Operator certificate expired
Trail Lake Lodge & Motel	Small T	In Compliance	Out of Compliance	Operator turnover
Wales	Small U	In Compliance	Out of Compliance	Operator turnover
YKSD - Merriline Kangas / Ruby	Small U	In Compliance	Out of Compliance	Operator certificate expired

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Appendix B Water System Excellence Award Certificates

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Ursa Major



Water System Excellence Award

The Department of Environmental Conservation recognizes

Eaglecrest Ski Area

for achieving and maintaining stellar compliance with the Operator Certification Program

L L

Drinking Water Program

ⁱⁿ 2019

Cindy Christian Drinking Water Program Manager



Martin Suzuki Operator Certification Program Manager Page intentionally left blank

Ursa Minor



Water System Excellence Award

The Department of Environmental Conservation recognizes

Skagway

for achieving and maintaining compliance with the Operator Certification Program

Drinking Water Program

2019

Cindy Christian Drinking Water Program Manager



Martin Suzuki Operator Certification Program Manager